Abstract of the Disclosure

SELF-CALIBRATION PROCEDURE IN PHYSICAL LAYER TRANSCEIVER FOR HOME TELEPHONE WIRE NETWORK

A novel method of configuring a physical layer transceiver for providing data communications via residential wiring. A transmit section of the transceiver produces a pulse signal having selected amplitude. This pulse signal received by an input circuit in a receiver section of the transceiver is used for adjusting the gain of the input circuit to a fixed optimum level. In particular, the gain of the input circuit may be adjusted in response to at least one pulse. A calibration circuit of the transceiver includes a comparator for comparing the receive signal produced at the output of the input circuit, with a threshold level, and controller that supplies the input circuit with a gain control value, and sets the threshold level. The controller reduce the gain control value to decrease the gain of the input circuit when the receive signal exceeds the threshold level. The gain control value is increased to raise the gain of the input circuit when the receive signal is less than the threshold level.